United States Department of Agriculture

Natural Resources Conservation Service

February 2008

# South Missouri Water Quality Project

## 2007 Annual Progress Report

*A Review of Fiscal Year October 1, 2006 — September 30, 2007.*

Issued February 2008

This document is a publication of the South Missouri Water Quality Project, Natural Resources Conservation Service (NRCS) of the U.S. Department of Agriculture. NRCS works in partnership with the American people to conserve and sustain natural resources on private lands.

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Cover Photo: The Rockbridge Grist Mill is located on the Spring River in Ozark County. Once a county seat, the town is now the setting for Rainbow Trout and Game Ranch, Inc.

# Message from the Team Leader

***Steven G. Hefner, Team Leader***

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Good land stewardship and a good quality of life go hand in hand and is the collective responsibility of all citizens. The South Missouri Water Quality Project continued to promote sound conservation stewardship in 2007 to southern Missourians by providing site-specific, science-based, technical assistance. I am proud to present this annual report, which details the accomplishments of the staff and its partners, to implement conservation within the Upper White River Basin of Missouri. Improving water quality through voluntary conservation practices is the fundamental objective of this effort. Our role is to serve as a catalyst and advance conservation through specific restoration and/or educational activities for urban and rural water protection.

The connection between land and water is a fundamental concept for all citizens to recognize regardless of land ownership status. Public water resources are affected by the degree of land management by private land owners. An example involves protecting land from soil erosion in the headwaters of watershed. Preventing erosion will decrease the treatment expense for city residents for water taken downstream from a river for public consumption. Retaining more sediment at the place of origin also enhances the productivity and sustainability of the land – a winning combination.

My sincere thanks are extended to those who partnered with the South Missouri Water Quality Project Office to complete projects, especially private Missouri landowners. Even as the demand for land for non-agricultural uses, such as roads, shopping centers, housing, and recreation increases, private land owners still manage over 93% of Missouri's land base. Our staff is committed to being a positive force in the health of the land and water of the Upper White River Watershed. As you review the details of the report, please feel free to contact our office either directly or through your local USDA Service Center if you have questions or need conservation assistance.

Steven Hefner

Team Leader, South Missouri Water Quality Project

# Contents



# Mission and Purpose

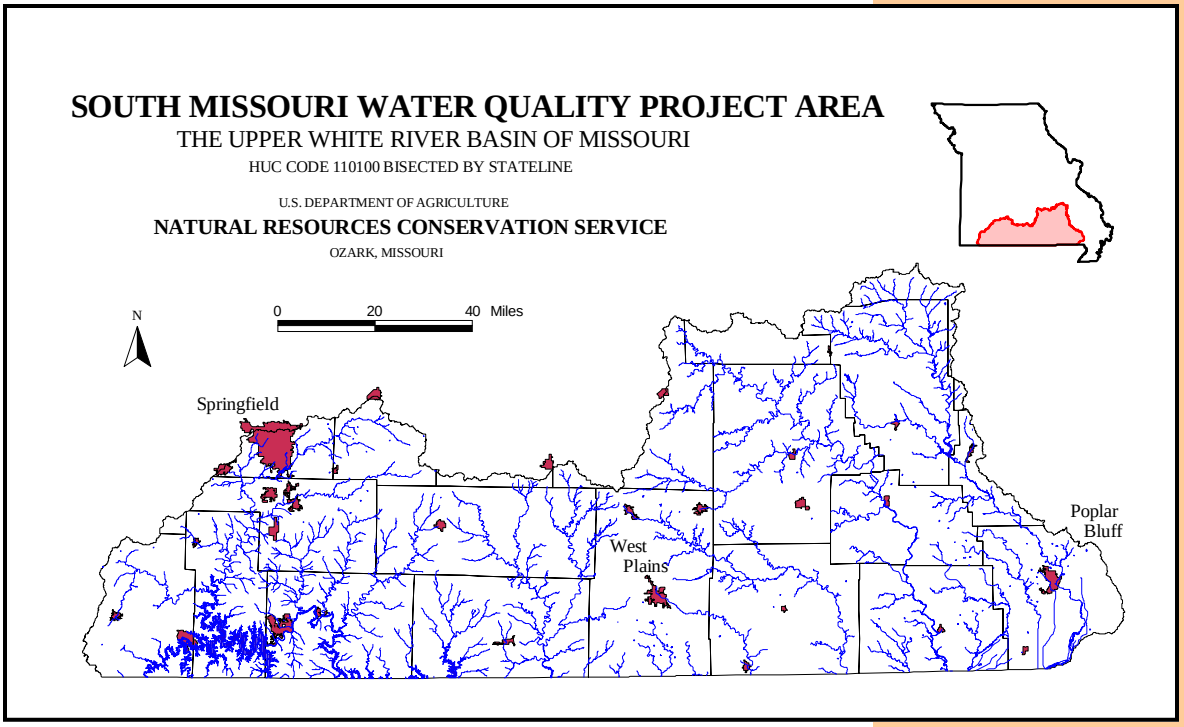
The mission of the South Missouri Water Quality Project is to provide voluntary conservation technical assistance to both rural and urban people to improve water quality in the Upper White River Basin. Input and oversight is provided by a local steering committee comprised of stakeholders with various interests in water quality. Conservation technical assistance is provided by an interdisciplinary staff of professionals to landowners, municipalities, local watershed groups, farmers, and businesses to promote stewardship of natural resources.

# Project Area

The Upper White River Basin, located primarily in the U.S. Interior Highlands region, is a 6 digit hydrologic unit (#110100, U.S. Geologic Survey) in Missouri and Arkansas comprising about 14.3 million acres. Runoff from the Upper White River Basin is received by the Lower White River Basin in Arkansas and eventually empties into the Mississippi River. Locally known as "the Ozarks," this ancient land form has been subjected to erosion that has left summits where resistant rock persists and valleys where runoff found less resistance from the land.

The state line divides the Upper White River Basin roughly in half with 47% of the land mass in Missouri and 53% in Arkansas. The project area for the South Missouri Water Quality Project includes land where the basin intersects 21 Missouri counties. The majority of the project area lies in the Ozark Plateaus, with a small portion in the Mississippi Alluvial Plain. Timber and livestock production are prevalent in the Ozark Plateaus, while deep soils and artificial drainage provide excellent row crop production in the Mississippi Alluvial Plain.

***Since 1935, USDA-NRCS, formerly the Soil Conservation Service, has provided technical assistance to landowners. In 1937, NRCS began planning and implementing voluntary conservation practices through soil and water conservation districts.***



# Steering Committee

**Ron & Maggie Kramer**
Texas County

**Cathy Proffitt-Boys**
Howell County

**Dennis Avery**
Butler County

**Kathryn Braden**
Taney County, Chair

**Becky Day**
Howell County

**Charlie Erickson**
Oregon County

**Paul Gilgen**
Shannon County

**Kay Golden**
Texas County

**Matt Morrow**
Greene County

**Debbie Redford**
Taney County

To help the South Missouri Water Quality Project become more successful in delivery of services, a steering committee was organized in July 2004 to offer guidance. Through the input of the Steering Committee, valuable local information about the state of the watershed and various conservation opportunities is provided. This input regarding the local resource concerns and key strategies for implementing conservation are important for, and appreciated by, the agency. The committee is comprised of individuals and community leaders who represent the broader spectrum of stakeholders having an interest in the quality of the basin's water and the economic viability of the region. Individuals have been recruited from various areas of the Upper White River Basin and serve as unpaid volunteers.

**Scene from a Steering Committee Meeting in West Plains September 2007**

*"I appreciate the opportunity to serve on the SMWQ Steering Committee. Gaining knowledge of how to help enhance water quality and protect natural habitat has always been important to me. Every meeting provides new ideas and examples of how dedicated individuals can make a difference. The future of protecting our natural resources depends on a concerted and continuing effort on many levels (public agencies, organizations, community groups, and individuals) to help balance the responsible growth that the communities of southern Missouri desire. I believe it is very important that state and federal agencies continue or expand their programs to cooperate with citizens to protect water quality and other natural resources throughout the region."*

*Dennis Avery*

Dennis Avery, SMWQ Project Committee Member, Butler County

# Water Quality Staff

***From Left Front Row:*** *Roger Hanson, State Conservationist, Mary Giles, Steve Hefner.* ***Back Row:*** *Adam Coulter, Clay Robertson, Robert DeMoss*

**Steve Hefner**, Team Leader, is responsible for staff administration, nutrient management, and watershed planning. He assists landowners with agricultural crops and livestock production systems.

**Mary Giles,** Information Assistant, markets the technical services of the staff, and coordinates water quality education and outreach activities. She facilitates opportunities for community involvement through academic partnerships and community service projects.

**Clay Robertson**, Resource Conservationist, provides conservation planning assistance to constituents in the fields of soils, erosion control, nutrient and grassland management, and irrigation. He focuses on writing comprehensive nutrient management plans for concentrated animal feeding operations and micro-irrigation design of windbreaks.

**Robert DeMoss**, Forester, uses local, state, and federal programs in implementing forestry conservation. He assists with thinning stands of trees to appropriate populations, restoring declining habitats such as glades or savannas, stabilizing and establishing riparian corridors, and reforestation of land.

**Adam Coulter,** Geographer, works with individual homeowners and city governments on non-agricultural resource concerns. His work includes urban sediment and erosion control, lawn management, rain gardens, parks and recreation, and storm water assistance.

**Despite being a newly organized effort, the staff of the South Missouri Water Quality Project has 48 years of collective public service experience with the United States Department of Agriculture.**

***Character, in the long run, is the decisive factor in the life of an individual and of nations alike."***

***Theodore Roosevelt, 26th President of the United States***

## STAFF ACCOMPLISHMENTS

- ***Since 2000,*** *assisted conservation organizations secure over 7 million dollars in non-point source grants for watershed planning, outreach, and conservation practices.*
- ***Since 2002,*** *inventoried over 18,000 acres of forestland and 1,000 acres of riparian forest buffers for the conservation development.*
- ***Since 2004,*** *conveyed the water conservation message to over 3,500 households through the Early Childhood Education Program.*
- ***Since 2004,*** *assisted many individual homeowners and over a dozen rural city governments in the watershed implement urban conservation.*
- ***2006*** *National Earth Team Chief's Field Award.* *(see photo above)*

# Urban Resource Planning

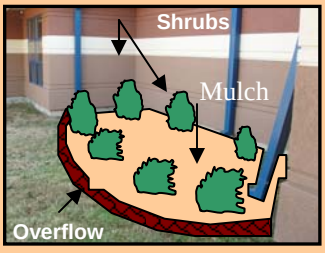
***"Complexity is one of the great problems in environmental design."***

***Christopher Alexander, Emeritus Professor of Architecture at the University of California, Berkeley***

**Hollister Middle School Conservation Plan**

Gutters concentrate storm water from roof.

Concentrated flow leads to erosion.




Proposed rain garden will capture water.

Urban conservation activities in the Upper White River Basin were directed toward homeowners or communities with resource concerns that were non-agricultural. Developed areas have significantly more impervious surfaces and less opportunity for infiltration. Rooftops, roads, parking lots, and compacted areas increase surface runoff and deliver more sediment, nutrients and other pollutants to receiving bodies of water. The variety of resource concerns in this setting generated projects that included source water protection planning, park and recreation renovation, urban lawn maintenance, erosion control, and rain gardens on both public and private lands. Promotion of the conservation ethic to urban communities helps strengthen the link between sound land management and clean water.

**Specific Accomplishments:**

- Prepared or reviewed 114 urban nutrient management plans in cooperation with the James River Basin Partnership in Springfield, Marshfield, Nixa, Ozark, West Plains, and-Sparta.

- Wrote 12 additional urban conservation projects with individual property owners outside of the urban lawn program. Planning addressed erosion, rain gardens, native plants, storm water, or tree health issues.

- Conservation Technical Assistance to public entities involving environmental assessments or natural resource protection planning prior to development or enhancements:

  - **City of Doniphan** (assessment for nature/athletic park)
  - **City of Ava** (documentation for source water protection plan)
  - **City of Cabool** (assessment for nature park development)
  - **City of South Van Buren** (storm water management plan)
  - **City of Gainesville** (conservation plan for athletic park)
  - **Hollister Middle School** (conservation plan addressing storm water)
  - **Willow Springs School** (bio-retention and rain gardens installed per plan)
  - **City of West Plains** (Storm water management assistance)
  - **Second Baptist Church** in Springfield (provided list of possible Environmental Community Projects)
  - **Ward Branch** Tree Planting (Ozark Greenways through a Springfield neighborhood)

# Forestry Assistance

***"Each generation takes the Earth as trustees. We ought to bequeath to posterity as many forest and orchards as we have exhausted and consumed. "***

***J. Sterling Morton Politian, Publisher, and Co-founder of Arbor Day***

Forestland comprises nearly 70% of the land cover in some of the sub-watersheds of the Upper White River Basin. The forestry industry is vital for these local economies. Forestry conservation and management is directly linked to good water quality. As in the past, the SMWQ Project continues to offer forestry assistance regarding timber stand improvement, glade and savanna restoration, riparian forest buffers, and reforestation.

In 2007, forestry assistance expanded when a special Environmental Quality Incentive Program (EQIP) voluntary signup enrolled Missouri landowners with interest in windbreaks. Windbreaks are vegetative barriers of trees and shrubs that afford protection from the wind, conserve energy, provide snow and erosion control, enhance wildlife habitat, and restrain visual, dust, and odor annoyance.

Historically, President Franklin Roosevelt's Shelterbelt Project in the 1930s replaced 40,000 acres of agricultural land with over 2,000,000 trees planted into windbreaks by the Civilian Conservation Corps on the Great Plains.

Today, the windbreaks established through the EQIP Program will be placed around animal feeding operations and farmsteads. A well designed windbreak can cut the energy requirements of an exposed homestead by 20-40%. Properly maintained, these trees should provide benefits for years to come.

*The Prairie States Forestry Project planted a series of shelterbelts in the great plains states.* ***US Forest Service Photo*** *(Foard County, TX 1936)*

*Windbreaks near animal operations and farmsteads will retard odor, dust, and save energy.*

**Specific Accomplishments:**

- Assessed 1,604 acres of forestland for voluntary conservation. The assessment resulted in 848 acres of conservation plans with private landowners to improve stands of timber or restore and protect declining habitats.
- Assessed 139 acres of riparian corridor resulting in 54 acres or 3.0 miles of planted or enhanced management.
- Serviced 12 landowners regarding windbreaks and prepared conservation plans representing 1.75 miles of wind protection. Many of these will be planted in FY 2008.

# Water Resource Protection

There is not a more honorable profession than to produce food or fiber. The strength of our country is, in part, dependent upon our ability to feed ourselves or provide for our basic needs through fiber production (e.g. lumber or textiles). Agricultural production requires significant water resources that must be utilized, but protected in a sustainable manner. Even with financial incentives offered through various conservation programs, substantial monies for conservation work come from the landowners themselves, and their investment in conservation also benefits the public at large.

In 2007, weather impacted conservation needs in the Upper White River Basin. The year brought a catastrophic ice storm in January. Trees suffered extensive damage and left significant fuel on forest floors. The third warmest March on record was followed by the worst April freeze in over 100 years. Grapes, peaches, berries, and other fruit crops broke dormancy early and were then destroyed from the late freeze. In the western region of the watershed, summer floods eroded fields and stream banks in May and June. By late summer, the eastern counties of Butler, Carter, Iron, Oregon, Reynolds, Ripley, and Wayne Counties suffered drought and left livestock producers with short forage supplies.

**Specific Accomplishments:**

- Assisted the USDA-FSA and NRCS field office implement the Emergency Conservation Program in Christian, Stone, and Taney counties to 7 landowners thereby completing the fiscal year 2006 drought related workload.
- Inventoried 1,379 acres of farmland for nutrient management conservation. Resulted in 815 acres of nutrient management conservation plans developed and 992 acres applied (some from previous FY).
- Provided irrigation assistance with 3 pump curve evaluations, one GPS survey, and one field inventory (Barton County).
- Produced 60 separate cartography map products in support of watershed activities. Map products were presented to Soil and Water Conservation Districts, Resource Conservation and Development Councils, and Non-Profit water quality groups to support web site, grant proposals, brochures, and public meetings.

***"Man's heart away from nature becomes hard."***

***Standing Bear, Ponca Native American Chief and Citizenship Activist***

*A January 2007 ice storm throughout the central U.S. left many Upper White River Basin residents without power and destroyed trees.*

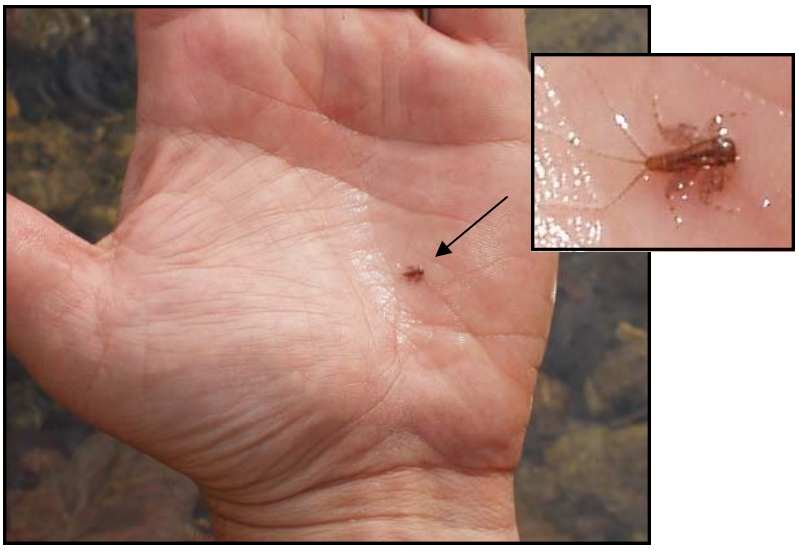
# Water Resource Protection

***"Study nature, love nature, stay close to nature. It will never fail you."***

***Frank Lloyd Wright***
***American Architect***

- Conducted 10 dry hydrant investigations (6 in Polk County and 4 in Taney County).
- Assessed and planned 5 abandoned wells for decommissioning.
- Collaborated with the University of Missouri Delta Research Center to conduct a soil fertility test on grassland. Completed the 4th year of an 8 year project to validate phosphorus and potassium soil recommendations. Information will be incorporated into local forage conferences and workshops for local landowners.

Flooding of the Finley River in Ozark on June 11, 2007.



*An abundance of mayflies indicates good water quality. Conservation practices that treat land also have positive benefits for stream habitat. Photo: Jennifer Mills, Earth Team Volunteer.*

# Watershed Planning

***"With a growing population, there is a growing need for more water delivery and storage."***

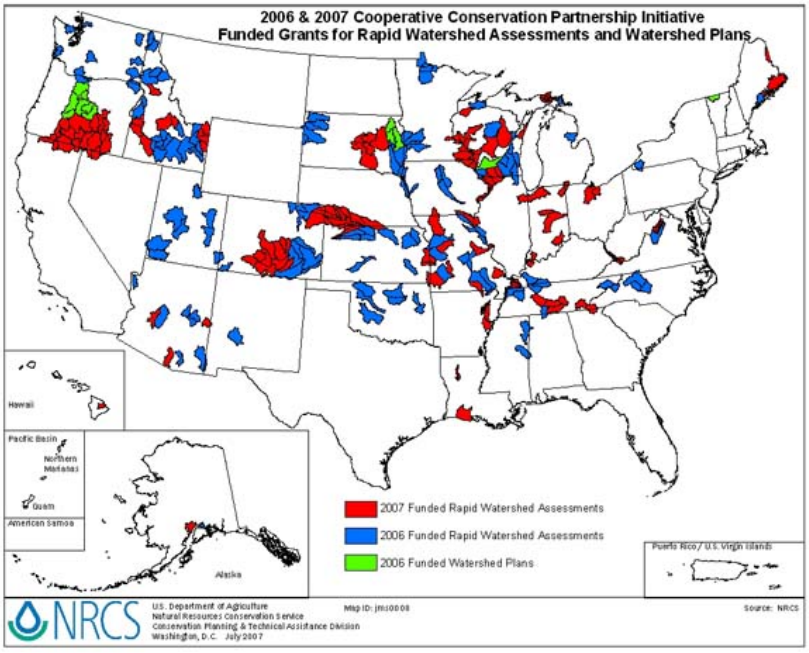
***Joe Baca***
***California***
***Congressman***

Watershed planning is useful to protect water resources regardless of whether these resources are impaired. Planning efforts need to be flexible and include local stakeholders. Plans may change with time but successful endeavors incorporate action or implementation. Planning efforts without action, or action in the absence of planning, can be wasteful. Although scholars will continue to debate the methods by which watersheds are analyzed, one thing is certain, some planning and evaluation is better than none.

The SMWQ Project continues to offer technical assistance to conservation organizations that desire to assess, evaluate, or conduct watershed planning. In 2007, a team of conservationists participated in a USDA pilot program to conduct Rapid Watershed Assessments. The assessments identify the primary resource concerns for the watershed being profiled and provide estimates as to where conservation investments would best address the concerns of landowners, conservation districts, and stakeholders. The information may lead strategic thinking to enhance the stewardship of natural resources through the promotion of sound land management practices.

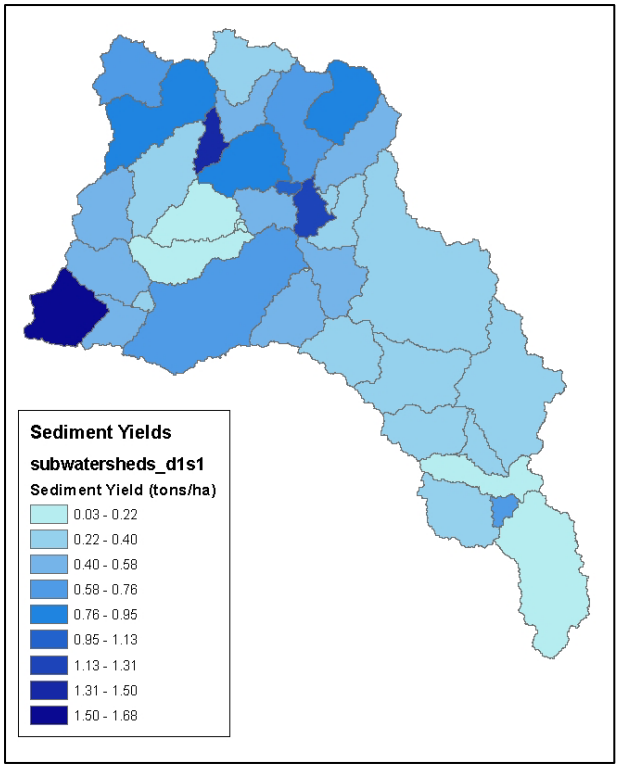
**Specific Accomplishments:**

- Conducted Rapid Watershed Assessments (RWA) for the Current and Black River Watersheds. A rapid watershed assessment evaluates resource conditions and needs on an 8-digit hydrologic unit code (HUC) basis. The RWAs are posted on the state office website at: http://www.mo.nrcs.usda.gov/technical/RWAs.html



# Watershed Planning

- Collaborated with the National Water Management Center (NWMC) to model sediment and phosphorus loading in the Current River Basin. The Automated Geospatial Watershed Assessment, a USDA Agriculture Research Service GIS-based product, was utilized by the NWMC for hydrologic modeling. The inputs required for its use are elevation data, soils, land cover, and precipitation (see inset).
- Provided assistance to the Oregon County SWCD to prepare a Special Area Land Treatment grant application for the Spring River Watershed.
- Provided assistance to the Webster County SWCD to prepare a Special Area Land Treatment grant application for the James River Watershed.
- Assisted the Jasper County SWCD prepare a 319 Water Quality Grant application for the Spring River Watershed.
- Assisted the Missouri State University Fruit Experiment Station in Mountain Grove develop a 319 Water Quality mini-grant for rain gardens.
- Assisted the City of Ava revise a 319 water quality mini-grant for watershed outreach, education, and restoration activities.
- Served on the Finley River 319 Technical Committee for planning and monitoring activities.




*The Automated Geospatial Watershed Assessment model estimates sediment loading in the Current River Watershed in southeast Missouri. Map courtesy USDA-National Water Management Center, 2007.*

***"Water is a finite resource that is essential in the advancement of agriculture, and is vital to human life."***

***Jim Costa, California Congressman***

# Professional Training

The early conservation movement in the United States, which initially focused on forestland, soon diversified to include other natural resource concerns. The designation of Yellowstone National Park, Arbor Day, and the U.S. Park Service are milestones in the early conservation movement. Later, the U.S. Soil Conservation Service (now the USDA-NRCS) organized in the 1930s and began implementing conservation based on a philosophy of sustainable utilization of natural resources. Practicing sustainable use requires knowledge of established and proven management techniques of natural resources developed and refined by historical conservationists. SMWQ Project staff strives to promote the conservation ethic and share these lessons with the public through formal and informal training opportunities.

**Specific Accomplishments:**

SMWQ Project staff assisted local entities with an interest in improving regional water quality by participating in the following events as a co-organizer, trainer, or speaker.

- Iron County Soil and Water Conservation District Annual Meeting (speaker)
- Finley River 319 Steering Committee (facilitation of meetings)
- Missouri State University Land Use Planning Seminar (speaker)
- Missouri State University Soil Conservation – Water Management Seminar (speaker)
- Community Partner in the Missouri State University Service Learning Program. Activities include water quality training in several disciplines related to conservation operations.
- Microsoft Publisher Training to various agency personnel (Instructor)
- Texas County Regional Riparian Workshop (speaker)
- Tri-County Master Gardeners Seminar (speaker - rain gardens).
- Southwest Master Gardeners Conference (speaker - rain gardens).
- Regional Envirothon competition (facilitation of event)
- Taney County Watershed Festival (speaker)
- Christian Schools of Springfield Fair (Exhibitor, Water Quality Education)
- Greene County Library Summer Reading Program (Coordinator, Water Quality Skit by ET volunteers).
- 1st Annual Natural Resource and Forage Conference (Planning committee & speaker, Howell County)
- Southern Bull Shoals SALT Forestry Workshop (speaker, Ozark County SWCD).
- Southern Bull Shoals SALT Riparian Workshop (speaker, Ozark County SWCD).
- Crane Creek SALT Technical Committee (Participant, Stone County).
- SMWQ update to the Watershed Committee of the Ozarks (Speaker).

***"The most important environmental issue is one that is rarely mentioned, and that is the lack of a conservation ethic in our culture."***

***Gaylord Nelson, former Governor and Senator for Wisconsin and Principle Founder of Earth Day.***

*Lauren Dempewolf, an Earth Team Volunteer and Missouri State University Service Learning Student, developed a lesson plan on the water cycle through the Early Childhood Education Program and taught the lesson in a Kindergarten classroom in Republic. Students in the program work under the supervision of Dr. Denise Cunningham and SMWQ Project staff in the development of lesson plans.*

*SMWQ Project staff provide orientation, civil rights tand water quality training for all volunteers who partner with the SMWQ Project and provide community service on water quality projects which support the mission of the office.*

# Outreach Activities

***"Ask not what your country can do for you...ask what you can do for your country."***

***John F. Kennedy Presidential Inaugural Address, January 20, 1961***


Actors in the Summer Reading Program Water Quality Skit: Left to Right: Denise Schriver, Brian Seagraves, Lauren Schriver, Caleb Bunselmeyer

It has been over 45 years since President John Kennedy's call to public service motivated a generation to action. He was successful in convincing the nation that "the educated citizen has an obligation to serve the public. He must be a participator and not a spectator." As the years have passed, many of those recruits are now leaving public service through retirement. However, the need to serve still exists today.

Just as President Kennedy's call to serve was extended to all Americans, the South Missouri Water Quality Project strives to provide equal and equable service to all citizens. Our commitment to civil rights is not only rooted in USDA policy, but an inward belief in "equal public service for all." Our efforts continue to include activities that are directed to audiences of society that have not traditionally participated with the agency.

**Specific Accomplishments:**

- Participated in the Greene County Library Summer Reading Club Program. Seven volunteers presented a water quality skit to 560 participants in 4 communities during 10 performances. Age appropriate conservation information was presented to both children and adults.
- Contacted over 500 individuals at the Ozarks Technical Community College Job Fair for Earth Team recruitment.
- Published two issues of the *Upper White River Review* newsletter and posted on the USDA State Office Web site. http://www.mo.nrcs.usda.gov/news/mowaterquality.html
  - Sent an email announcement of the newsletter to 240 individuals in November, 2006 and 237 individuals in May, 2007.
- Produced an Annual Report (18 pages) and posted on the USDA State Office Web site. http://www.mo.nrcs.usda.gov/news/mowaterquality.html
  - Sent an email announcement of the annual report to 246 individuals.
- Continued implementation of a Water Quality Preschool Program to educate the youngest citizens of the watershed. 1,351 students were issued water quality fact sheets targeting their adult guardians detailing services provided by the office.
- Distributed the SMWQ semi-annual progress report to 20 Soil and Water Conservation Districts summarizing the assistance and services provided to each district through the office.

*Just like wildflowers in nature, people will bloom when given the opportunity.*

# Outreach Activities

**Media Projects published featuring South MIssouri Water Quality services and activities:**

- Co-authored a manuscript, *Building Soil Potassium and Phosphorus in a Low-Testing Fescue Field*, to Better Crops With Plant Food, a publication of the International Plant Nutrition Institute (Vol. 91, No. 4, 2007, pg 22-23). The article summarizes three years of collaborative work in Howell County with the MU Delta Center.
- Featured in Missouri State University's Citizenship & Service Learning (CASL) Annual Report highlighting the *PhotoStore* computer science and Early Childhood Education Projects (pages 22-24).
- *Students Boost Experience Volunteering*, an article published in the Springfield News-Leader featured volunteering opportunities at the South Missouri Water Quality Office (circulation 88,970).
- Public Service Announcement recognizing the USDA-NRCS partnership award recipients was published in December in the Springfield-News Leader (circulation 60,889).
- *MSU Students Create Software for USDA*, an article in the Springfield Business Journal featured the computer science software development program Photostore (circulation 6,100).

**Visual Graphic Projects created to convey the conservation message.**

- Produced a video regarding the SMWQ Earth Team volunteer program and submitted to the State Office Public Information and Marketing.
- Designed 10 Early Childhood Education lesson plans and posted on the state office website. Sent an email announcement of the early childhood lesson plans posted on web to 46 education professionals in the field.
- Designed 41 Earth Team awards and presented to volunteers to recognize service.
- Designed a marketing brochure for the Wright County Soil and Water Conservation District detailing available services.
- Designed 8 posters for Christian County Soil and Water Conservation District conservation contest.
- Designed 2 posters for the Southwest Missouri Resource and Conservation District held in St. Louis.
- Designed a Civil Rights training/fact sheet for Earth Team volunteer orientation.
- Created a user guide for Publisher software. The guide was utilized to train 7 local conservation employees in graphic design.

***"What's near and dear to my heart is cooperative conservation."***

***Gale Norton,***
***United States Secretary of the Interior***

**Early Childhood Water Lesson Plans on the NRCS Website**

**http://www.mo.nrcs.usda.gov/lessonplans.html**

**PreK — K**

- Leaves Need Water
- Erosion
- Dragonfly Habitat
- Water Cycle
- Good Water/Bad Water
- Water Pollution

**1st Grade**

- Worms in the Rain
- Bodies of Water and Landforms
- Who Needs Water

**2nd Grade**

- Solid, Liquid, Gas
- Exercise and Water
- Rainforest Terrarium

**3rd Grade**

- Absorb, Repel, Evaporation
- Sink or Float
- Steamy Molecules

# Earth Team Activities

***"If we can get kids talking about and doing it, they can have a great influence on their parents by lecturing them and pointing the finger."***

***Kevin Richardson, Singer***

Congress authorized legislation in 1981 that allows the NRCS to utilize volunteers. Through the Earth Team Volunteer Program the SMWQ Project cooperatively provides individuals opportunities to serve in community based projects. Our goal is to engage others in our conservation mission.

**Specific Accomplishments:**

- Reduce work load by securing 1572 hours of labor from 96 volunteers (0.78 staff year) through promotion of the USDA Earth Team Program to assist in program delivery, and to access human talent and services not readily available at the field level. Given the standard volunteer rate of $18.77/hr, this volunteer effort represents $29,515.
- 55 of the Earth Team volunteers presented age appropriate, pre-approved water quality curriculum to 1,351 students at area preschools in eight local towns in the watershed.
- Partnered with 5 Missouri State University/Earth Team student volunteers to develop a software program, *PhotoStore*, to assist with digital media storage. Provide input to the technical team regarding needed software features and coordinated the national certification process through the USDA Interoperability Lab in Beltsville, MD.
- Brittany Baker, Earth Team volunteer, completed a local fertilizer inventory at various outlets in the Greater Springfield area to support the Urban Lawn Program.
- Participated in the Greene County Library's Summer Reading Club Program. Earth Team volunteers presented a water quality skit to 560 participants in four communities during ten performances. Age appropriate conservation information was presented to both children and adults.

# Detail Assignment

Reorganized the Lawrence County USDA-NRCS case file system. Over 300 case files were complete broken down and re-organized to adhere to NRCS Area 4 policy. Some case files contained documentation dating to the 1960s.